25X1A
25X1
25X1

CLASSIFICATION SECRET/

CENTRAL INTELLIGENCE AGENCY

REPORT NO

INFORMATION REPORT

CD NO.

COUNTRY East Germany

DATE DISTR. 21 April 1953

25X1C SUBJECT RFT Funkwerk Koepenick
1953 Research and Development Program

NO. OF PAGES 3

NO. OF ENCLS.

SUPPLEMENT TO REPORT NO.

25X1X

THIS IS UNEVALUATED INFORMATION

1. Funkwerk Koepenick, Wendenschlosstrasse 154-158, Berlin-Koepenick, received about 210 research and development orders for 1953. While the orders were assigned to Funkwerk by the Zentralamt fuer Forschung und Technik (ZAFT) of the State Planning Commission, final approval from the Ministry of Post and Telecommunications is necessary. The Ministry will probably change or cancel some of them. Additional orders for Funkwerk are expected from the Ministry, resulting from projects now handled by VEB Funkanlagen, Berlin-Koepenick.

2. Research and development work at Funkwerk Koepenick is divided into three sections:

a) Construction of transmitters
b) Construction of measurement devices;
c) Construction of special equipment.

These three main sections are subdivided in the following way:

a) Construction of transmitters:
   1) Radio transmitters
   11) Ship transmitters
   111) Heat generators
   1[illegible]) Small transmitters (Kleinsender).

b) Construction of measurement devices:
   1) Measurement devices for transmitters
   11) "Traditional" measurement devices
   111) Measurement devices for special equipment

c) Construction of special equipment:
   1) Special ship equipment
   11) Other special equipment

CLASSIFICATION

STATE	x	NAVY	x	NSRB	
ARMY	x	AIR	x	FBI	

25X1A
25X1

3. The "traditional" devices mentioned above include devices of the kind built previously by Gema and the Zentrallaboratorium fuer Signal-und Sonderanlagen 1/, such as oscillographs, spectrometers and impulse devices. The measurement devices for special equipment developed and built in the same section are needed to build the equipment constructed in section c. This section is chiefly concerned with the development of steering equipment for ships, such as control and command equipment, gyroscopic compasses, automatic pilots and rudder control equipment. Until the beginning of 1952, this section also developed railroad signal equipment but the 1953 orders do not include such production. Among "other special equipment" is the radar development work which is in its very initial stage. 2/

4. The 1953 research and development capacity of Funkwerk Koepenick will undergo a significant change in that a large part will be shifted from the development of "traditional" equipment to the development of transmitter equipment. In 1952 the proportion of man hours spent in section B (Construction of measurement devices) was 20 percent for the construction of transmitter devices, 75 percent for the construction of traditional devices and five percent for the construction of special devices. The corresponding ratio as planned for 1953 and 1954 is, respectively, 80 percent, 15 percent and 5 percent. Transmitter development and construction, including development and construction of accessory equipment, thus assumes an ever-increasing role in the works' entire development and construction program.

5. Development and construction of transmitters:

a) The 1953 program includes development and construction of those transmitters which were under development in 1952 and were carried over into the 1953 program. They include a single side band transmitter of 50 kW in the 12 to 100 meter range (Hf-A); a 50 kW radio transmitter in the 12 to 100 meter range (Hf-B); a twilling transmitter, each one of its two parts operating with about 240 kW in the 500 to 1800 kHz range; a long-wave radio transmitter of about 250 kW and 170 kHz (SL 2); a mobile 10 kW short-wave transmitter (KN 3); postal transmitters of 5 and 10 kW and 100 MHz. 3/

b) Among the 1953 orders which are not extensions of development in progress, are

i) Development of a new-type antenna (Kabeldipolantenne), a short-wave antenna which can be tuned electrically and with a reactance to be compensated automatically;

ii) Development of improved modulating procedures on the basis of research work done abroad, for instance by Doherty and Taylor;

iii) Development of new-type measurement devices for high-powered transmitters, such as tetrameters, and improved impulse devices for the recording of the characteristics of transmitting valves.

c) Development and construction work carried out in the subdivision engaged in the construction of ship transmitters is done in fulfillment of Russian as well as German orders. The main customers of the subdivision are the Russian and East German navies. Russian orders are for reparations (re-equipping of salvaged German ships transferred into Russian ownership) and for the construction of radio equipment for ships of the Russian Navy. German orders are for the construction of control and command devices, radio installations, and emergency signalling equipment for the East German fishing and Police fleets.

d) The orders concerning development of heat generators are mostly extended 1952 orders. A 50 kW induction heat generator (induktiver Waermegenerator) for the hardening of gears, begun in 1952 for the Liebertwolkwitz machine factory, is near completion. Heat generators of the same type with 100 and 200 kW are to be developed in 1953; the 200 kW type is expected to harden the gears of tractors and big machine tools within a few minutes. Development of a capacity heat generator (kapazitiver Waermegenerator) for the Eisenacher Motorenwerke (BMW) will be completed in 1953; this generator works with 20 kW and about 27 mcs. The 1953 program includes the development of a generator of the same type with 50 kW and 27 mcs. for drying non-ferrous and synthetic materials. Development of a high-frequency sewing machine of about 150 watts and 27 mcs. for the welding (Schweissnaehen) of thermo-plastic material will be completed during the first part of 1953.

25X1A
25X1
25X1A

e) The sub-division for the construction of small transmitters was founded in [illegible] 1952. It will become one of the largest and most important development and construction divisions of the works since it is known that sizable funds have been allotted to it. The sub-division is headed by Dr. Wilhelm Grimm, a returnee from Russia who joined the works in the fall of 1952. Dr. Grimm was formerly a department head in the Telefunken firm where he was in charge of the construction of small transmitters in large series to be installed in airplanes and field packs (Tornistergeraete). Dr. Grimm draws 3,600 DM per month, among the highest salaries paid by the works.

f) The section engaged in the construction of transmitters is headed by Walter Heine.

25X1 g/ [redacted] Comment: Gema was the name of a Russian-sponsored company established after the end of hostilities at the present address of Funkwerk Koepenick. The Zentrallaboratorium fuer Signal- und Sonderanlagen is one of the former names of Funkwerk Koepenick.

25X1 h/ [redacted] Comment: [redacted]

25X1 i/ [redacted] Comment: For more details [redacted] 25X1

25X1A [redacted] 25X1